

REMARKS

Claims in the case are presently 1-5. No claims have been amended, no claims have been added, and no claims have been cancelled herein. Claims 6-10 were previously cancelled without prejudice in an amendment dated 22 February 2005.

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schinski. This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Schinski discloses an additive for cementitious compositions that includes: cellulose ether (e.g., methyl cellulose and mixed alkyl and hydroxyalkyl derivatives); starch ether (e.g., hydroxyl alkyl starches); and a polyacrylamide (e.g., anion polyacrylamides of acrylamide and acrylic acid salts). See the: abstract; column 2, lines 34-48; column 3, lines 37-40; and column 4, lines 1-4 of Schinski.

Schinski discloses combining the three essential components (cellulose ether, starch ether and polyacrylamide) of his additive composition by mixing only. See column 4, lines 37-39 of Schinski. Schinski does not disclose, teach or suggest preparing his additive composition by a combination of mixing and milling.

The cellulose ether blends of Applicants' present claims are prepared by means of a combination of mixing and milling. The combination of mixing and milling provides the cellulose ether blends of Applicants' claims with increased bulk density. In particular, the cellulose ether blends of Applicants' present claims have a bulk density of more than 40 g/l greater than the bulk density of a comparative cellulose ether blend prepared by mixing in the absence of milling.

Attention is directed to Examples, 3 and 4, and comparative Example 16 on pages 12, 16 and 17 of the specification. In these examples, comparable methylhydroxyethyl cellulose and starch ether components were used. The cellulose ether blends of Examples 3 and 4 are in accordance with the present invention and were prepared by a combination of mixing and milling. Comparative Example 16 was prepared by mixing only, in the absence of milling. Examples 3 and 4 and Comparative Example 16 include 2 percent by weight of starch ether

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additive, however, the blend of Comparative Example 16 has a bulk density of only 208 g/l, while the blends of Examples 3 and 4 have bulk densities of 256 g/l and 262 g/l (an average of 259 g/l), (an increase in bulk density of 51 g/l).

In the Office Action of 8 June 2005 it is argued that Applicants have failed to show that the additive composition of Schinski does not satisfy the bulk density of Applicants' presently claimed cellulose ether blend. Applicants respectfully submit that Comparative Example 16, as discussed previously herein, does represent an additive composition according to Schinski (without polyacrylamide), and the properties thereof may be reasonably compared with the properties of representative cellulose ether blends according to Applicants' present claims (i.e., Examples 3 and 4). As such, Applicants respectfully submit that they have met their burden of production relative to showing that compositions according to Schinski do not satisfy the bulk density requirements of Applicants' presently claimed cellulose ether compositions.

On page 3 of the Office Action of 8 June 2005, it is argued that milling of a cellulose ether composition would necessarily result in the formation of a product that is more compact, due to minimizing the presence of air entrapped in pores of the non-milled material. Applicants respectfully disagree, and submit that an increase in bulk density would not necessarily result from milling, and such an increase would not be deemed obvious to a skilled artisan. As particle size decreases, particle surface area increases, and accordingly at least as much air may reside between the smaller particles, as would be recognized by a skilled artisan. In addition, and perhaps more importantly, as particle size is decreased and surface area is increased, there is also a corresponding increase in the repulsive forces between the surfaces of the individual particles that may result in a milled product having the same or reduced bulk density relative to the non-milled starting material, as would be recognized by a skilled artisan.

With regard to the comments on page 3 of the Office Action of 8 June 2005, Applicants respectfully further submit that "[e]xaminer's assumptions do not constitute the disclosure of prior art." *In re Rijckaert*, 9 F.3d 1531, 1533, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993).

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Schinski provides no disclosure or suggestion with regard to cellulose ether blends that are prepared by a combination of mixing and milling. In light of the preceding discussion, Schinski does not disclose, teach or suggest cellulose ether blends having the improved bulk density properties of the cellulose ether blends of Applicants' claims.

"Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference." *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000). Modifying "prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999) (citations omitted).

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Schinski. Reconsideration and withdrawal of the present rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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